RESPONSE TO EXAMINER'S ADVISORY ACTION BEFORE THE FILING OF AN APPEAL BRIEF, CONTINUATION OF NOTE 3

1. Applicant has remedied the notations by examiner in this "Request For Continued Examination," filed in lieu of an "Appeal Brief."

EXAMINER ERRS IN STATING VILLANNEVA "READS ON" HILL CLAIM

VILLANNEVA BALLAST BUOY VS. HILL BALLAST PISTON

CONTINUATION OF NOTE 11

1. By placing the ballast in the Villanueva buoy at the uppermost point of travel, Villanueva's buoy with ballast changes the causes and creation of dynamics from Hill's weighted piston with the ballast at the lower most point of travel inside of the cylinder and thus does not "read on" on Hill's claim.
2. By placing the ballast in the buoy, Villanueva's buoy with ballast requires a universal joint between the buoy and the rigid connector shaft. This universal joint allows the buoy only to oscillate due to the kinetic energy created by the waves and does not allow the rigid connecting shaft, whose movement from the kinetic energy of the wave is up and down, to oscillate or be flexible. Whereas Hill's buoy with flexible connector, not shaft, provides kinetic energy and allows for flexing and oscillation, with its'

connector in a state of tension, from the uppermost part of the buoy affected by the wave to the uppermost part of the cylinder or hawser guide.

3. The Hill pumping system requires no universal joint or rigid shaft. The Hill pumping system uses a clevis as the connection to between the buoy, the flexible connector and the weighted piston, as the connector is in a state of kinetic tension, is flexible its' entire length, allowing the kinetic energy from the wave to both oscillate the buoy, flex the connector and move the piston.
4. The Hill connector is always in a state of tension with the exception of a few nanoseconds when the piston reaches the apex of its' travel and is about to descend and is never in a state of compression as is Villanneva's rigid shaft.
5. As Villanueva's buoy with ballast only is oscillating above the universal joint only, a second universal joint is required at the base of Villanueva's pump cylinder to allow the cylinder to oscillate only from the kinetic energy of the wave transmitted through the connecting shaft whose movement from the wave is restricted to an up and down motion. Hill's cylinder is rigidly affixed and requires no oscillation, as Hill's connector is flexible and the wave's kinetic energy to oscillate, raise and lower is transmitted from the upper most portion of the buoy to the uppermost portion of the cylinder

or hawser guide while raising and lowering the piston vertically within the confines of the rigid cylinder.

6. It is Villanueva's buoy, not the piston that is weighted, with the ballast at the uppermost point of travel, connected with a universal joint at the buoy, which allows for oscillation of the buoy only, at the surface only, as a separate entity from the piston and rigid connector shaft. The Hill ballast weighted piston which is always at the lower most point of travel requires no special universal joint between the buoy and the connector nor does it require a universal joint between the mounting base and pump cylinder, as does Villanueva, as it functions as a separate entity from the buoy. The Hill connector allows for oscillation and flexing of the entire assembly from the opening in the top of the pump cylinder to the clevis on the buoy at the surface.

7. Villanueva's buoy with ballast requires a rigid shaft between the universal joint and the piston to pump, as it is in a state of compression, on the down stroke. The Hill weighted piston, as the ballast is in the piston, may use either a flexible or rigid connector as the connector is always in a state of tension.

8. Villanneva's buoy with ballast and universal joint requires a rigid shaft that will withstand the compression on the down stroke. The Hill ballast-weighted piston's connector is in a state of tension at all times with the

exception of the few nanoseconds at the apex of its' travel and may be either flexible or rigid.

9. Villanueva's buoy with ballast, universal joint and rigid shaft is limited as to how long the length of an unsupported rigid shaft can be. The Hill ballast weighted piston connector can be unlimited in length and no supports are required.

10. Villanueva's buoy with ballast, universal joint and rigid shaft requires a Stuffing box on the top of the cylinder, designed for holding packing braids which upon being pressed would preclude as much as possible any leakage of the water being pumped. The Hill pump, pumps fluid on the down stroke only and does not require a stuffing box and packing braids on the top of the cylinder.

11. Villanueva's buoy with ballast requires a Adjustable head fitting which will press upon the textile square sectional braid packings within the stuffing box at the head or top of each Cylinder through which plunger moves up and down so as to preclude any possible leakage between the plunger and the cylinder in the process of pumping. The Hill pump, pumps fluid on the down stroke only and does not require an adjustable head on a stuffing box on the top of the cylinder.

12. Villanueva's buoy with ballast requires a pumping cylinder with a universal joint that will swivel. The Hill buoy, connector and ballast-weighted piston's cylinder is rigidly mounted and does not swivel.

13. Villanueva's buoy with ballast requires a universal joint between the base of the pump cylinder and it's base mount to compensate for the inability of Villanneva's shaft and universal joint at the buoy to be flexible but only allow the oscillation of buoy. The Hill ballast-weighted piston's pump cylinder requires no universal joint between the base of the pump cylinder and the base mount as it is rigidly mounted as the Hill connector is flexible its' entire length.

14. Villanueva's buoy with ballast requires at least 4 mooring lines attached to pump cylinder to prevent collapse of pumping system. The Hill ballast-weighted piston's cylinder requires no mooring lines as it is rigidly mounted.

15. Villanueva's buoy with ballast requires a flexible plastic hose between the oscillating pump cylinder and fixed discharge line. The Hill discharge line from the rigid pump cylinder can be either rigid or flexible.

16. Villanueva's buoy with ballast, universal joint and rigid shaft manhole upon the deck of the Villanneva buoy 1-A at the very Center or midpoint thereof, through which the necessary ballast called for could be inserted and safely placed in a cavity provided therefore at the bottom of the hull thereof, in order to secure the most effective and the highest possible efficiency of performance of said Villanneva buoy. The Hill piston weighted pump requires no manhole in it's buoy.

17. Villanneva buoy manhole cover is provided with plunger arranged for pressing its gasket 32A against the surface of flange of manhole 31. Not required in Hill piston weighted pump with flexible connector.

18. Villanueva's buoy with ballast, universal joint and rigid shaft requires a gasket to be placed in-between the flange of Man- bole 31 and the flange of manhole cover 32 in order to secure absolutely water tightening of the point. Not required in Hill piston weighted pump with flexible connector.

19. Villanueva's buoy with ballast, universal joint and rigid shaft requires a protuberance or bulge seen outside the Villanneva buoy I-A corresponding to the hollow cavity 36 there within from where the socket halves of a "ball and socket joint' are fastened for admission of the "ball" 2 of the joint, fastened to the end of connecting rod 3-A attached to the plunger 3 of the hydro-undulatory water wave power arrester pump. Not required in Hill piston weighted pump with flexible connector.

20. Villanueva's buoy with ballast, universal joint and rigid shaft requires bolts hinged all around the manhole flange, ready for swinging or turning around for insertion into the slots of the manhole cover gasket and manhole cover proper in preparation for tightening the nuts thereto corresponding. Not required in Hill piston weighted pump with flexible connector.

21. Villanueva's buoy with ballast, universal joint and rigid shaft requires nuts corresponding to the swinging Bolts 34 which upon tightening will cause

the Manhole cover flange 32 to press Gasket 32A against the flange of Manhole 31. Bolt nuts, preferably of the castellated type, duly attached to their corresponding bolts and checked so as not to go further than the tips of the latter in order to be ready for immediate tightening after the bolts have been proper swung and inserted into the slots provided in the flange of manhole cover 32 and perhaps the gasket 32A included therewith. Not required in Hill piston weighted pump with flexible connector.

22. Villanneva buoy requires a space within the Hollow Cavity corresponding to he Bulge or Protuberance 33 serving as storage for ballast loaded or removed through Manhole 31 in order to secure the necessary weight of the Buoy and attachments thereto for the proper functioning of the HYDRO-UNDULATORY POWER ARRESTER. Not required in Hill piston weighted pump with flexible connector.

23. Petitioner alleges the examiner further errs by saying that Villanneva's fig 15 shows buoys similar to Hill's as prior art. Petitioner alleges these examples are not renewable energy buoys but examples of fixed Navigation and Mooring Buoys.

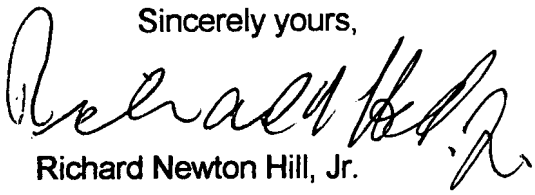
24. Additional differences between Villanneva and Hill have already been cited in applicant's "Request For Reconsideration", sent by U. S. Mail to the Commissioner Of Patents, March 26, 2007 page 3, line 14 through page5, line 6 and page 6, line 14 through page 7 line 7.

ANDERSON PISTON VS. HILL PISTON

1. The Anderson piston is weighted sufficient to return the piston to its' lowest point of travel and is not used to pump fluid while pumping fluid on the upstroke. The Hill piston is ballast-weighted sufficiently to actually pump the fluid on the down stroke as well as returning the piston to its' lowest point of travel while drawing fluid in only on the upstroke.

2. Additional differences between Anderson and Hill have already been cited in applicant's "Request For Reconsideration" of March 26, 2007 page 5, line 10 through page 7 line 7.

Sincerely yours,



Richard Newton Hill, Jr.

ENDNOTE
EXAMINER'S PROPOSED CLAIMS 45-53
PROPOSED

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard Hill on January 18, 2007.

The application has been amended as follows:

Claims 22-44 are canceled.

New claims 45- are added below:

-- 45.(new) A wave actuated submersible pump for use in an open body of water, said wave actuated submersible pump comprising,

a pump cylinder having an open top end and a bottom end, the bottom end attached to a lower plate for securing said pump to the floor of the open body of water,

an inlet check valve and an outlet check valve connected to openings in the pump cylinder near the lower plate, said inlet check valve allowing for the intake of water from the body of water and said outlet check valve controlling the flow of water from the pump to a remote location,

a weighted piston vertically reciprocally movable within the pump cylinder and forming a pump chamber defined by said cylinder, said weighted piston and said lower plate,

a buoy connected to the weighted piston by a flexible connector for driving the weighted piston on an upward stroke in response to wave action, said weighted piston being driven in a downward stroke under force of gravity,

a means for restricting the upward stroke of the weighted piston mounted adjacent to the open top end of the pump cylinder,

a mooring guide and wear ring mounted to the top open end of the pump cylinder, said flexible connector passing through said mooring guide and wear ring and being attached to the top of the weighted piston at a first end and to a lifting eye of the buoy at a second end, and

said weighted piston including an air vent passageway, a check valve ball and an air vent chamber for allowing air entrapped within the pump chamber to vent through the air vent passageway and out the open top of the pump cylinder.

46 .(new) The wave actuated submersible pump of claim 45 wherein said flexible connector is a chain.

47. (new) The wave actuated submersible pump of claim 45 wherein said flexible connector is a cable.

48. (new) The wave actuated submersible pump of claim 45 wherein said means for restricting the upward stroke of the weighted piston is a plurality of

stop pins which are securely attached and pass through openings adjacent said open top end of the pump cylinder.

49. (new) The wave actuated submersible pump of claim 45 wherein said lower plate is a bottom plate suitable for imbedding the pump cylinder in the floor of the open body of water.

50. (new) The wave actuated submersible pump of claim 45 wherein said lower plate is a bottom flange plate for securing the pump cylinder to submerged foundations at the floor of the open body of water.

51. (new) The wave actuated submersible pump of claim 45 wherein said weighted piston includes sealing rings to provide a seal against the pump cylinder.

52. (new) The wave actuated submersible pump of claim 45 wherein said buoy includes a mooring eye used to stabilize the direction of travel of the buoy.

53. (new) The wave actuated submersible pump of claim 45 wherein the water pumped by the submersible pump is delivered from the outlet check valve to a hydro-electric power plant including a reservoir which stores the pumped water and then delivers it to hydro-electric generators. --